

Notice of Allowability

Application No.

10/650,086

Examiner

Callie E. Shosho

Applicant(s)

BREDT ET AL.

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 9/5/07 and telephonic interview conducted 9/13/07.
2. ☒ The allowed claim(s) is/are 1-4, 6, 7, 10-15, 18, 19, 21-24, 26-31, 33, 34, 36-41, 43-53, 57-68, 70-74, 76 and 78-80.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 9/13/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

(1) In the specification, page 1, line 4, after "April 10, 2001," and before "which", insert "now U.S Patent No 6,610,429,".

(2) In the specification, page 11, line 10, after "alcohol," and before "sugar", delete "calcined lime,".

(3) Claim 6, line 2, after "particulate" and before "adhesive", insert "water-soluble".

(4) Claim 7, line 2, after "particulate" and before "adhesive", insert "water-soluble".

(5) Claim 10, line 1, after "claim" and before "7", delete "1 or".

(6) Claim 11, line 2, after "particulate" and before "adhesive", insert "water-soluble".

(7) Claim 12, line 2, before "comprises", delete "further".

(8) Claim 18, line 2, after "particulate" and before "adhesive", insert "water-soluble".

(9) Claim 19, line 2, before "comprises", delete "further".

(10) Claim 22, line 2, after "particulate" and before "adhesive", insert "water-soluble".

(11) Claim 23, line 2, before “comprises”, delete “further”.

(12) Claim 43, line 4, after “ethylene glycol” and before “propylene glycol”, delete “and” and insert “,”.

(13) Claim 49, line 2, after “cellulose fiber”, delete “cellulose derivative fiber,”.

(14) Claim 50, line 4, after “adhesive” and before “is”, insert “that”,

(15) Claim 63, line 2, after “of” and before “,”, delete “plaster” and insert “semihydrate of calcium sulfate”.

(16) Claim 66, line 1, after “Currently”, delete “amende” and insert “amended”.

(17) Claim 76, line 4, after “fatty esters” and before “ethylene glycol octyl/decyl ester”, delete “such as methyl oleate,” and insert “selected from the group consisting of methyl oleate and”.

2. Authorization for this examiner’s amendment was given in a telephone interview with Natasha Us on 9/13/07.

Statement of Reasons for Allowance

3. The present claims are allowable over the “closest” prior art Elden (U.S. 3,303,147), GB 2155944, and Yang (U.S. 3,852,083) for the following reasons:

Elden discloses dry powder composition comprising plaster, adhesive, i.e. polyvinyl acetate, and carbohydrate. However, the composition of Elden requires the use of retardant which in direct contrast to each of present claims 1, 50, and 58 which each require composition characterized by the absence of retardant. There is also no disclosure that the dry powder composition comprises particles having mean diameter of about 10 microns to about 100 microns as required in each of present claims 1, 31, 50, and 58. Further, there is no disclosure in Elden of adhesive material that comprises polyvinyl pyrrolidone copolymer with vinyl acetate as required in present claim 31 or particulate adhesive that is dextrin as required in present claim 58. Additionally, there is no disclosure in Elden that the composition is a three-dimensional printing composition and thus, no disclosure or suggestion of method of three-dimensional printing as required in present claim 38. There is no disclosure in Elden that the dry powder composition has mean particle size of about 10 microns to about 300 microns or comprises printing aid as required in present claim 39. There is also no disclosure in Elden of kit comprising three-dimensional printing composition comprising dry, loose, free-flowing particulate material including plaster and first particulate adhesive and aqueous fluid as required in each of present claims 66, 70, and 71. There is also no disclosure in Elden that the composition comprises oil as required in present claim 72.

GB 2,155,944 discloses powder composition comprising water-soluble polymer, filler including gypsum, and polymer such as polyvinyl acetate. However, there is no disclosure in GB

2,155,944 of semihydrate of calcium sulfate as required in each of present claims 1, 31, 50, and 58. There is also no disclosure in GB 2,155,944 that the dry powder composition comprises particles having mean diameter of about 10 microns to about 100 microns as required in each of present claims 1, 31, 50, and 58. There is also no disclosure in GB 2,155,944 of accelerator as required in each of present claims 1, 50, 58, 66, and 72. Further, there is no disclosure in GB 2,155,944 of adhesive material that comprises polyvinyl pyrrolidone copolymer with vinyl acetate as required in present claim 31 or particulate adhesive that is dextrin as required in present claim 58. Additionally, there is no disclosure in GB 2,155,944 that the composition is a three-dimensional printing composition and thus, no disclosure or suggestion of method of three-dimensional printing as required in present claim 38. There is no disclosure in GB 2,155,944 that the dry powder composition has mean particle size of about 10 microns to about 300 microns or comprises printing aid as required in present claim 39. There is also no disclosure in GB 2,155,944 of kit comprising three-dimensional printing composition comprising dry, loose, free-flowing particulate material including plaster and first particulate adhesive and aqueous fluid as required in each of present claims 66, 70, and 71. There is also no disclosure in GB 2,155,944 that the composition comprises oil as required in present claim 72.

Yang discloses composition comprising plaster, filler, adhesive, i.e. polyvinyl alcohol, and mineral oil. However, there is no disclosure in Yang that the composition comprises dry, loose, free-flowing particulate material as required in each of present claims 1, 31, 38, 39, 50, 58, and 72. There is also no disclosure in Yang of accelerator as required in each of present claims 1, 50, 58, 66, and 72. Further, there is no disclosure in Yang of adhesive material that comprises polyvinyl pyrrolidone copolymer with vinyl acetate as required in present claim 31 or particulate

adhesive that is dextrin as required in present claim 58. Additionally, there is no disclosure in Yang that the composition is a three-dimensional printing composition and thus, no disclosure or suggestion of method of three-dimensional printing as required in present claim 38. There is no disclosure in Yang that the dry powder composition has mean particle size of about 10 microns to about 300 microns or comprises printing aid as required in present claim 39. There is also no disclosure in Yang of kit comprising three-dimensional printing composition comprising dry, loose, free-flowing particulate material including plaster and first particulate adhesive and aqueous fluid as required in each of present claims 66, 70, and 71.

Thus, it is clear that Elden, GB 2155944, and Yang, either alone or in combination, do not disclose the present invention.

Further, applicants' amendment filed 9/5/07 overcomes the 35 USC 112, first and second paragraph rejections of record.

In light of the above, the present claims are passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
9/13/07